## Appendix 1

**Table 2.1 City of Lynchburg Demographics** 

City of Lynchburg					
Population <sup>1</sup>	65,269				
Area	50.25				
Real Property Value <sup>2</sup>	\$3,471,288,000				

 $<sup>^{1}</sup>$  U.S. Census Bureau, 2000.  $^{2}$  City of Lynchburg Assessors Office, January 1, 2005.

**Table 3.1 LF&EMS Station Staffing** 

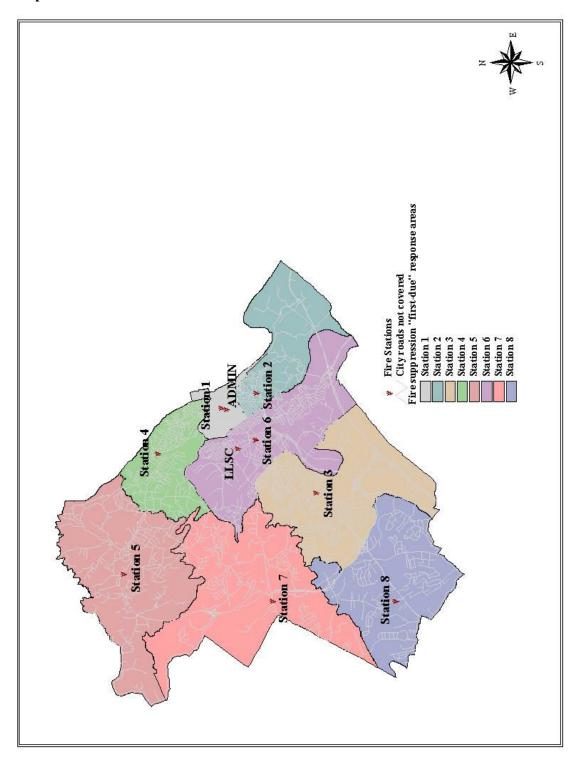
Station	Apparatus	Full Staffing	Minimum Staffing
		Battalion 1	
Station 1	Engine 1	3 FF/EMT-B's and	3FF/EMT-B's
	Truck 1	1 FF/EMT-P 4FF/EMT-B's	3 FF/EMT-B's
	Medic 1	1 FF/EMT-B and 1 FF-EMT-P	1 FF/EMT-B/1 FF-EMT-P
	Battalion 1	1 FF/EMT-B	1 FF/EMT-B
	Tech 1 Utility/Brush 1	Cross-staffed <sup>3</sup> Cross-staffed	Cross-staffed Cross-staffed
Station 2	Engine 2	4 FF/EMT-B's	3 FF/EMT-B's
g, ii	Medic 2 <sup>4</sup>	2 EMT-B's	2 EMT-B's
Station 4	Engine 4	2 FF/EMT-B's and 1 FF/EMT-P	3 FF/EMT-B's
	Medic 4	1 FF/EMT-B and 1 FF/EMT-P	1 FF/EMT-B/1 FF-EMT-P
Station 5	Engine 5	3 FF/EMT-B's and 1 FF/EMT-P	3 FF/EMT-B's
	Medic 5	Reserve	Reserve
		Battalion 2	
Station 3	Engine 3	2 FF/EMT-B's and	3 FF/EMT-B's
	Medic 3	1 FF/EMT-P 1 FF/EMT-B and 1 FF/EMT-P	1 FF/EMT-B/1 FF-EMT-P
	Rescue 1 <sup>5</sup>	3 FF/EMT-B's	3 FF/EMT-B's
Station 6	Engine 6	2 FF/EMT-B's 1 FF/EMT-P	3 FF/EMT-B's
	Medic 6	1 FF/EMT-B and 1 FF/EMT-P	1 FF/EMT-B/1 FF-EMT-P
Station 7	Engine 7	3 FF/EMT-B's and 1 FF/EMT-P	3 FF/EMT-B's
	Truck 2	4FF/EMT-B's	3 FF/EMT-B's
	Battalion 2	1 FF/EMT-B	1 FF/EMT-B
	Medic 7	Reserve	Reserve
	Haz Mat 1	Cross-staffed	Cross-staffed
Station 8	Utility/Brush 2 Engine 8	Cross-staffed 3 FF/EMT-B's and 1 FF/EMT-P	Cross-staffed 3 FF/EMT-B's
	Medic 8	Reserve	Reserve

 $<sup>^{3}</sup>$  A practice whereby emergency responders staff several types of emergency response vehicles simultaneously within a work period. The type and scope of emergency (i.e. structure fire, vehicle accident) dictate which type of emergency response vehicle the emergency responders staff for an incident.

Medic 2 is staffed eight hours a day (Monday through Friday) for non-emergency transports only.

The Rescue unit is staffed with a minimum of one technical rescue specialist, one hazardous materials specialist and one firefighter.

**Map 3.1 Station First Due Districts** 



## A1.4 Lynchburg Fire & EMS Standard of Response Cover Appendix

**Table 4.1 City of Lynchburg Population** 

	1990*	2000*	2010**	% change 2000-2010
City of	66,049	65,269	65,300	0.04%
Lynchburg	00,049	03,209	05,300	0.0476

Sources: \*US Census, \*\*Weldon Cooper Center

**Table 4.2 Frequency of All Calls: 2002 – 2004** 

Risk Category	2002	2003	2004	Total
Fire				
Structure	472	538	430	1,440
Auto	142	132	138	412
Brush	148	94	108	350
Trash	15	20	14	49
Explosion	5	7	5	17
Transportation	2	2	3	7
Miscellaneous	370	395	493	1,258
Fire Alarms	590	602	573	1,765
Sub-total	1,744	1,790	1,764	5,298
EMS: Emergency				
Emergent	5,527	6,057	6,244	17,828
Urgent	3,041	3,289	3,277	9,607
Sub-total	8,568	9,346	9,521	27,435
EMS: Non-Emergency				
Public assist	108	254	188	550
Transport only	3,122	2,894	2,622	8,638
Sub-total	3,230	3,148	2,810	9,188
Other				
Hazardous Materials	268	299	202	769
Technical Rescue	73	101	95	269
Mutual Aid				
All Mutual Aid	109	205	164	478
Total	14,952	15,886	15,622	43,437
Average per Day	41	44	43	42

Station	Low	Moderate	Significant	Maximum	Total
#1, Clay St.	589	1,190	181	2	1,962
#2, Grace St.	760	1361	163	0	2,284
#3, Fort Ave.	558	4,514	153	0	5,225
#4, Rivermont	717	2,681	124	1	3,523
#5, Boonsboro	596	2,622	27	0	3,245
#6, Miller Park	1,203	3,403	355	1	4,962
#7, Lakeside Dr.	766	3,393	124	0	4,283
#8, Graves Mill	580	3,528	50	1	4,159
Total	5,769	22,692	1,177	5	29,643

Figure 4.1 Risk Type By Station Response Area

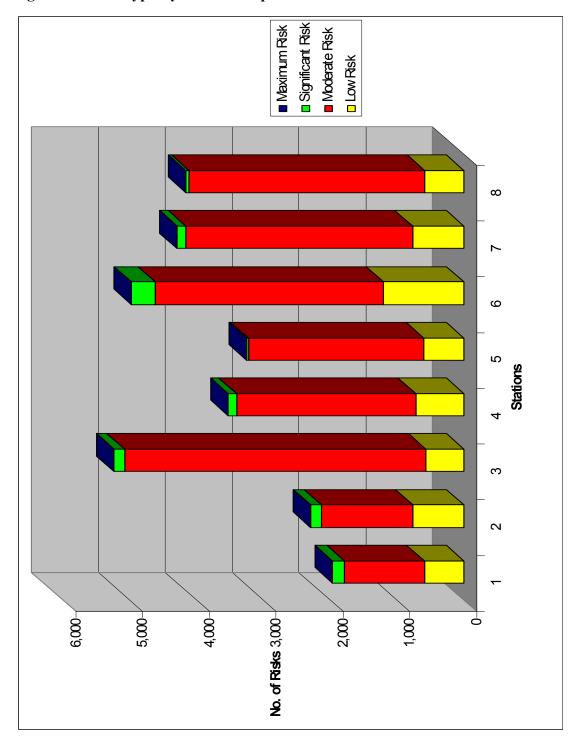
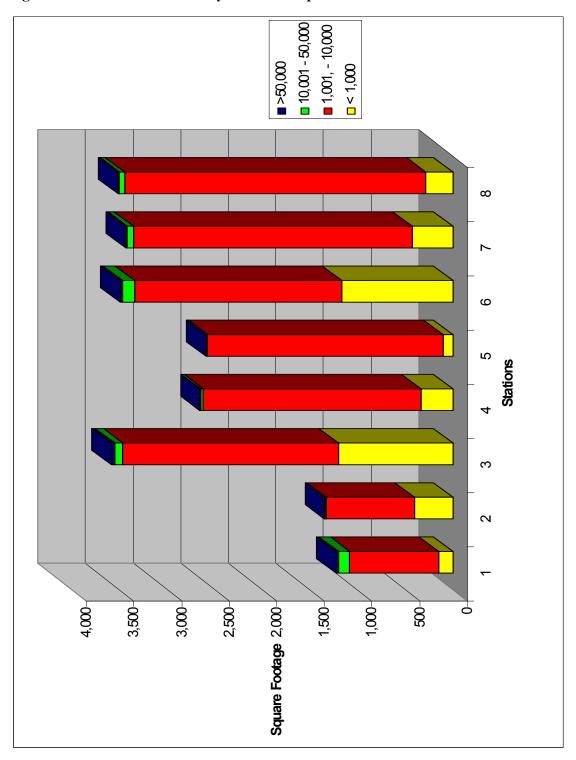


Table 4.4 Size of Buildings by Station Response Area (in square footage)

Station	< 1,000	1,001 - 10,000	10,001 - 50,000	> 50,000	Total
#1, Clay St.	146	936	121	19	1,222
#2, Grace St.	402	926	13	5	1,346
#3, Fort Ave.	1,202	2,261	88	36	3,587
#4, Rivermont	337	2,282	28	4	2,651
#5, Boonsboro	102	2,473	15	1	2,591
#6, Miller Park	1,165	2,175	126	28	3,494
#7, Lakeside Dr.	430	2,925	61	19	3,435
#8, Graves Mill	284	3,161	53	16	3,514
Total	4,068	17,139	505	128	21,840

Figure 4.2 Size of Structures By Station Response Area



**Table 4.5 Frequency of Fire Incidents, 2002-2004** 

Type of Fire Incidents	2002	2003	2004	Total
Structure	476	547	437	1460
Auto	142	132	138	412
Brush	148	94	108	350
Trash	15	20	14	49
Explosion	5	7	5	17
Transportation	2	2	3	7
Fire Alarms	586	593	566	1745
Miscellaneous	370	395	493	1258
Total	1744	1790	1764	5298
Daily Average	4.8	4.9	4.8	4.8

Table 4.6 Confinement of Fire Spread, 2002-2004

Fire Area	2002	2003	2004	Total
Object of Origin	31.1%	29.2%	25.0%	28.1%
Room of Origin	26.2%	33.3%	37.5%	31.7%
Floor of Origin	9.8%	12.5%	10.7%	10.8%
Structure of Origin	32.8%	18.8%	17.9%	23.4%
Beyond Structure Of Origin	0.0%	6.3%	8.9%	4.8%

**Table 4.7 Frequency of Fire Alarms: 2002-2004** 

Fire Alarms	2002	2003	2004	Total	Yearly Average
Total	924	1,143	1,055	3,122	1,041
Arrived	602	764	694	2,060	687
Cancelled Enroute	322	379	361	1,062	354
Fire Alarms Daily Average	2.5	3.1	2.9	2,081	

**Table 4.8 Frequency of EMS Incidents: 2002-2004** 

Туре	2002	2003	2004	Total	<u>%</u>
Emergency					
Emergent	5,667	6,198	6,401	18,266	47.8%
Urgent	3,448	3,647	3,638	10,733	28.1%
Sub-total	9,115	9,845	10,039	28,999	75.9%
Non-Emergency					
Public assist	108	254	188	550	1.4%
Transport only	3,122	2,894	2,622	8,638	22.6%
Sub-total	3,230	3,148	2,810	9,188	24.1%
Annual Total	12,345	12,993	12,849	38,187	100.0%
Daily Average	33.8	35.6	35.2	34.9	

Table 4.9 Frequency of EMS Incidents (by call type): 2002-2004

Incident Type	2002	2003	2004	Total
Emergent				
Accident PI	564	646	643	1,853
Allergic Reaction	86	78	113	277
Assault	140	141	157	438
Severe Bleeding	254	354	360	968
Breathing Problems	1,125	1,186	1,128	3,439
Burns	18	15	19	52
CO Inhalation	8	7	4	19
Chest Pain	647	729	799	2,175
Choking	66	59	68	193
Sudden Death	54	54	68	176
Drowning (Near)/Diving	5	4	4	13
Electrocution	2	3	3	8
Faint/Unconscious	548	648	644	1,840
Fall - Serious	790	966	950	2,706
Heart Problem	284	325	339	948
Hit and Run - PI	21	23	29	73
Malicious wounding	105	108	101	314
Pregnancy/Childbirth	152	144	145	441
Seizures	427	378	368	1,173
Stroke	273	212	235	720
Traumatic accident	98	118	224	440
Urgent				
Abdominal Pain	189	323	329	841
Accident Unknown PI	250	272	271	793
Animal Bite	8	18	16	42
Attempted Suicide	68	42	39	149
Back Pain	123	125	137	385
Domestic Violence	68	90	102	260
Minor Bleeding	90	50	37	177
Diabetic	339	301	294	934
Heat/Cold Emergency	9	8	3	20
Eye Problems	11	13	14	38
Falls/Back Injury Minor	213	195	133	541
Headache	39	38	26	103
Home Medical Alarm	26	69	65	160
Overdose	93	118	137	348
Person Check	278	208	204	690
Psychiatric	133	88	158	379
Sick Person	1,511	1,689	1,673	4,873
Public assist				
First Aid Call	108	254	188	550
Transport only				
Non-emergency Transport	3,122	2,894	2,622	8,638
Total	12,345	12,993	12,849	38,187
Daily Average	34	36	35	35

Table 4.10 Frequency of Hazardous Materials Incidents: 2002-2004

Call Type	2002	2003	2004	Total
Biological	1	2	2	5
Chemical	0	0	0	0
Bomb Discovered/Threat	12	13	12	37
Carbon Monoxide Alarm	9	29	21	59
Fuel Spills	143	152	85	380
Natural Gas Leak/Odor	103	103	82	288
Total	268	299	202	769
Daily Average	0.7	0.8	0.6	0.7

**Table 4.11 Frequency of Technical Rescue Incidents: 2002-2004** 

Call Type	2002	2003	2004	Total
PIER Stand-bys	69	96	91	256
Confined Space	0	0	0	0
High-/Low-Angle	0	2	0	2
Trench	0	1	1	2
Structural Collapse	0	0	0	0
Dive Team	0	0	1	1
Swift Water Rescue	4	2	2	8
Total	73	101	95	269
Daily Average	0.20	0.28	0.26	0.25

**Table 4.12 Frequency of Miscellaneous Incidents: 2002-2004** 

Call Type	2002	2003	2004	Total
Illegal Burn	65	53	88	206
Elevator Entrapment	46	43	56	145
Smoke Odor Outside	76	43	46	165
Total	187	139	190	516
Daily Average	0.51	0.38	0.52	0.47

Table 4.13 Frequency of Mutual Aid By County, 2002-2004.

Total Mutual Aid Incidents			
	2002	2003	2004
Amherst	37	50	23
Bedford	10	10	7
Campbell	99	195	157
Total	146	255	187

Fire Mutual Aid Incidents				
	2002	2003	2004	
Amherst	2	2	7	
Bedford	4	4	4	
Campbell	0	0	4	
Total	6	6	15	

EMS Mutual Aid Incidents				
	2002	2003	2004	
Amherst	35	48	16	
Bedford	6	6	3	
Campbell	99	195	153	
Total	140	249	172	

Table 4.14 Total Incidents and Frequency, 2002-2004

Risk Category	2002	2003	2004	Total
Fire				
Structure	472	538	430	1,440
Auto	142	132	138	412
Brush	148	94	108	350
Trash	15	20	14	49
Explosion	5	7	5	17
Transportation	2	2	3	7
Miscellaneous	370	395	493	1,258
Fire Alarms	590	602	573	1,765
Sub-total	1,744	1,790	1,764	5,298
EMS: Emergency				
Emergent	5,527	6,057	6,244	17,828
Urgent	3,041	3,289	3,277	9,607
Sub-total	8,568	9,346	9,521	27,435
EMS: Non-Emergency				
Public assist	108	254	188	550
Transport only	3,122	2,894	2,622	8,638
Sub-total	3,230	3,148	2,810	9,188
Other				
Hazardous Materials	268	299	202	769
Technical Rescue	73	101	95	269
Mutual Aid				
All Mutual Aid	109	205	164	478
Total	14,952	15,886	15,622	43,437
Average per Day	41	44	43	42
Response Every X Minutes	0:35:07	0:32:45	0:33:30	0:34:20

Figure 4.3 All Incidents By Month of the Year: 2002-2004

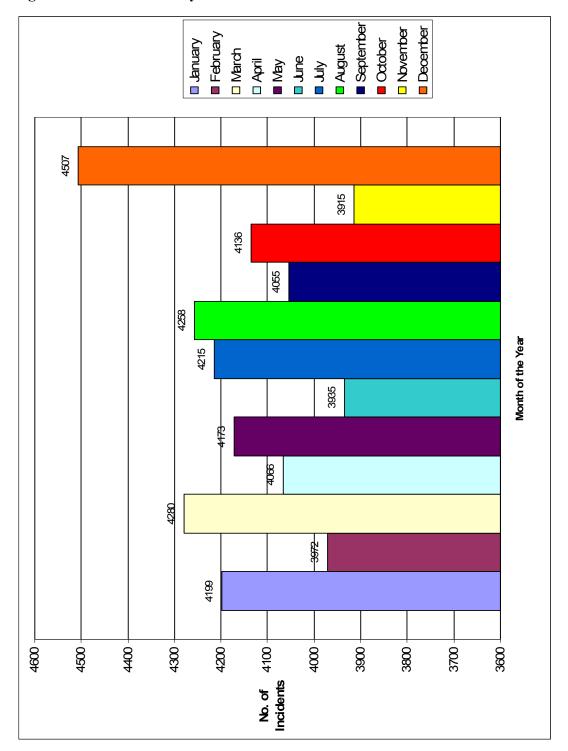


Figure 4.4 All Incidents By Day of the Week: 2002-2004

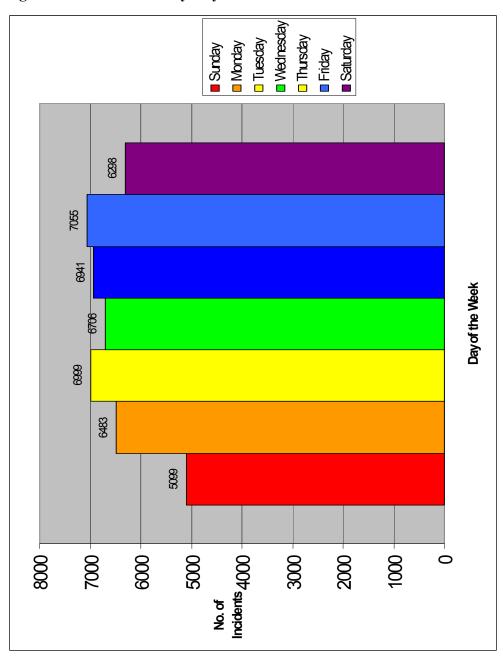


Figure 4.5 All Incidents by Hour of the Day: 2002-2004

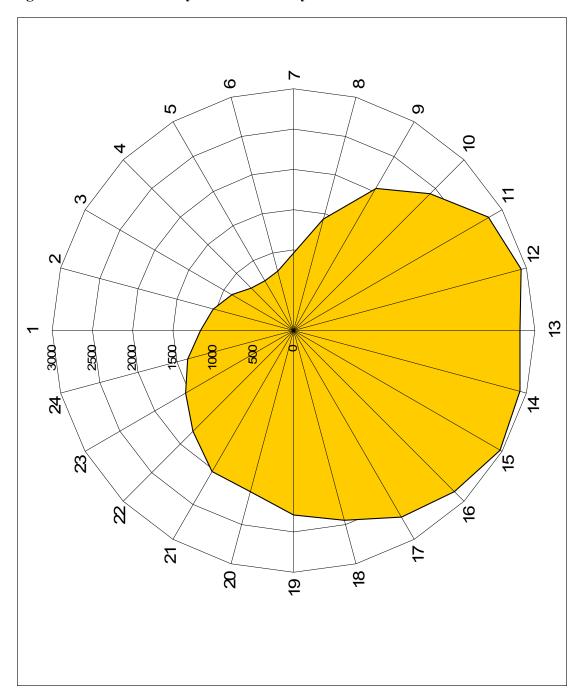


Figure 4.6 All Fire Incidents By Day of the Week: 2002-2004

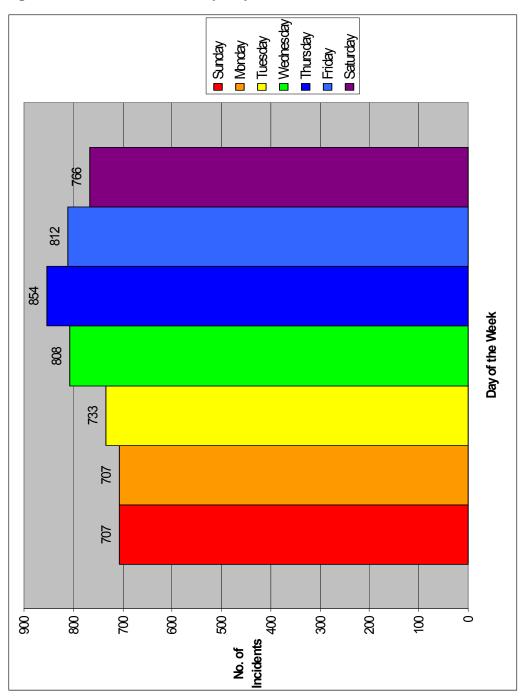


Figure 4.7 All Fire Incidents By Hour of the Day: 2002-2004

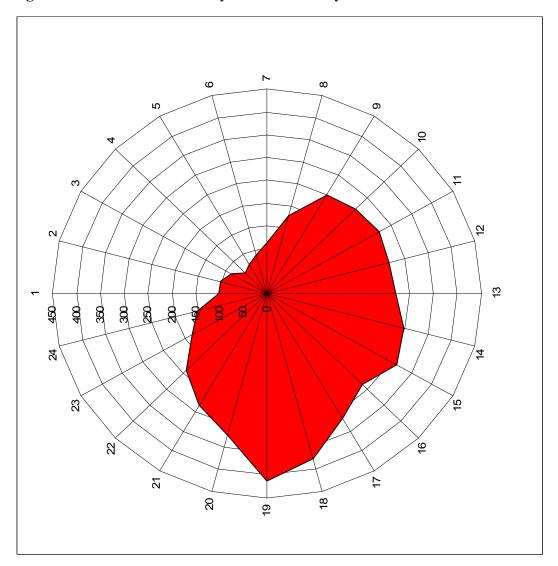


Figure 4.8 Structure Fires By Day of the Week

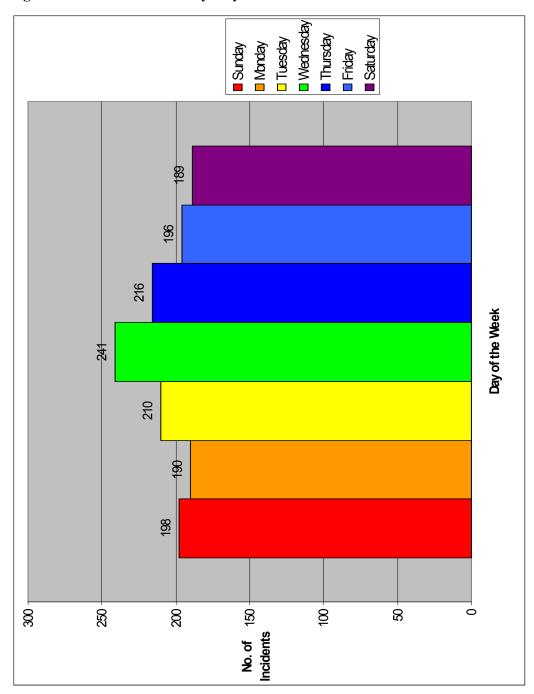


Figure 4.9 Structure Fires By Hour of the Day: 2002-2004

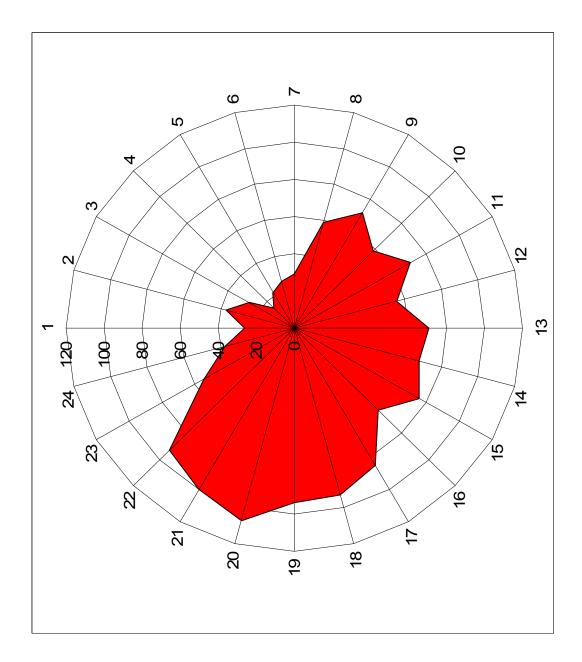


Figure 4.10 Automobile Fires By Day of the Week: 2002-2004

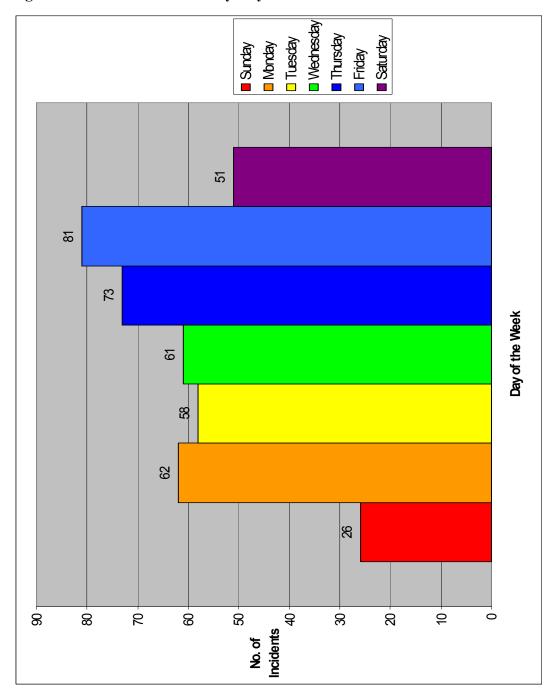


Figure 4.11 Automobile Fires By Hour of the Day: 2002-2004

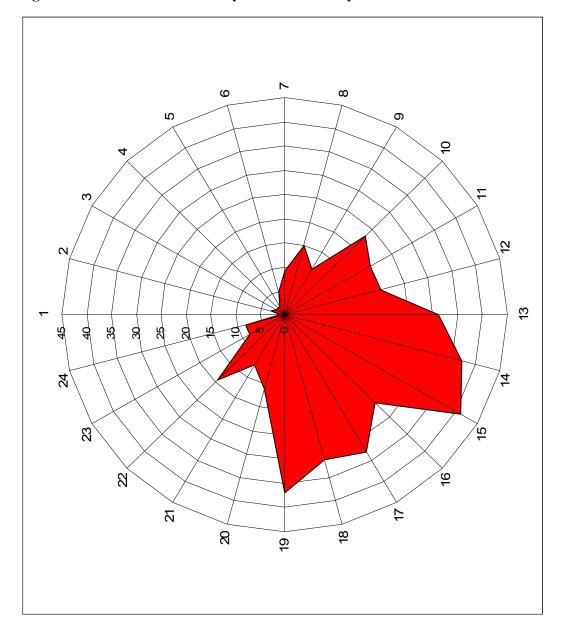


Figure 4.12 Brush Fires By Day of the Week: 2002-2004

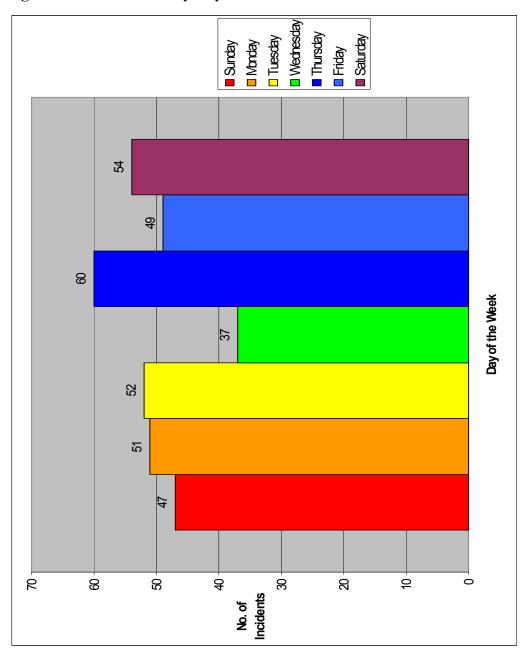


Figure 4.13 Brush Fires By Hour of the Day: 2002-2004

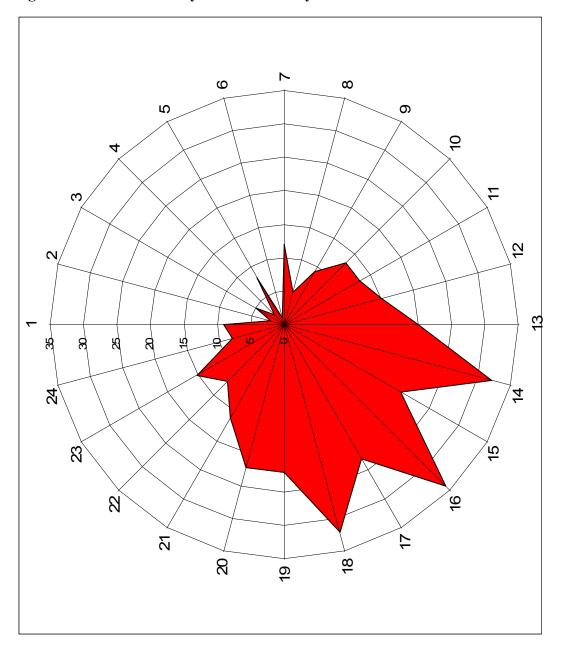


Figure 4.14 Trash Fires By Day of the Week: 2002-2004

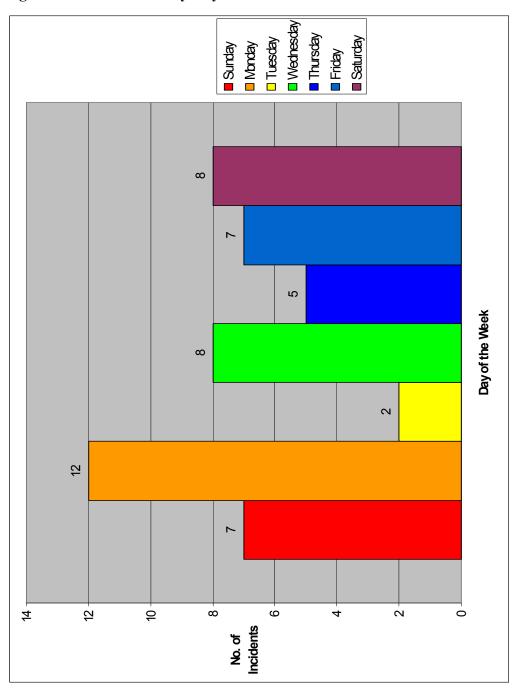


Figure 4.15 Trash Fires By Hour of the Day: 2002-2004

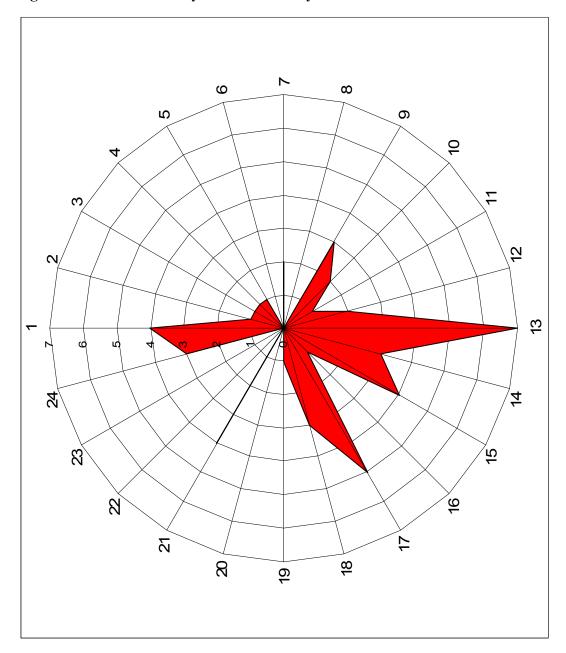


Figure 4.16 Explosions By Day of the Week: 2002-2004

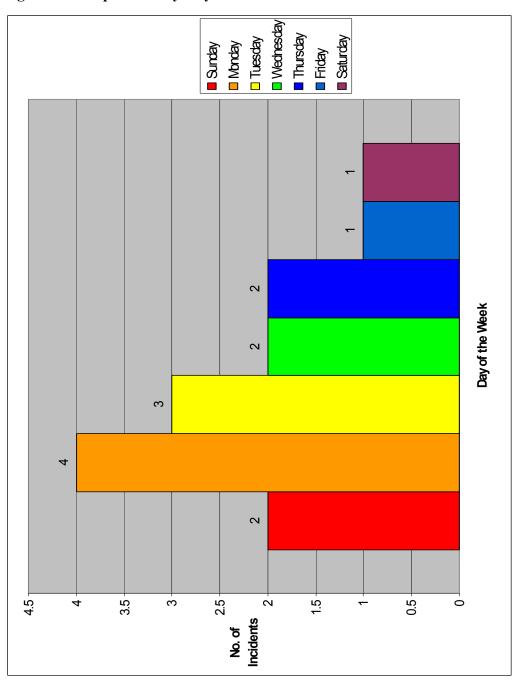


Figure 4.17 Explosions By Hour of the Day: 2002-2004

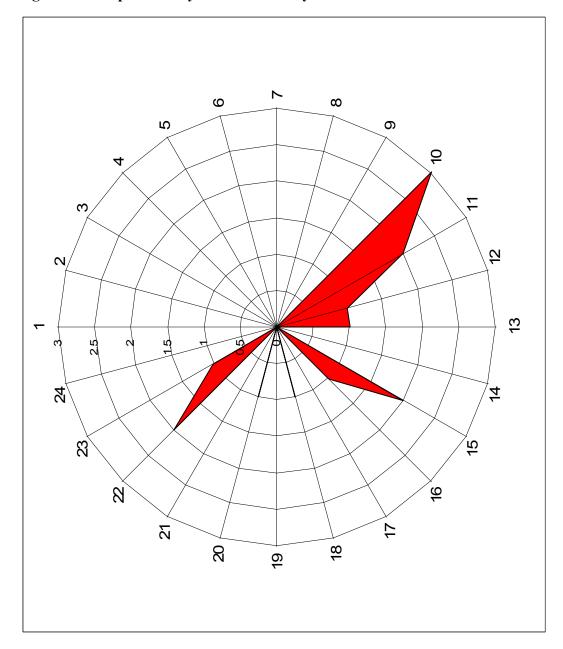


Figure 4.18 Transportation Incidents By Day of the Week: 2002-2004

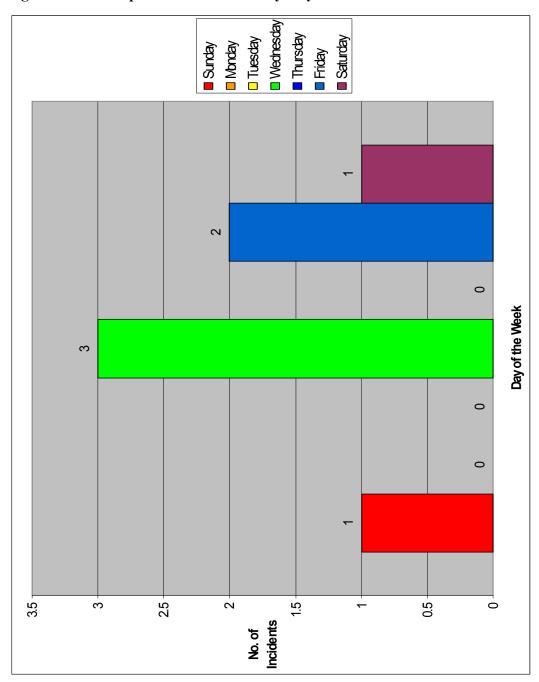


Figure 4.19 Transportation Incidents By Hour of the Day: 2002-2004

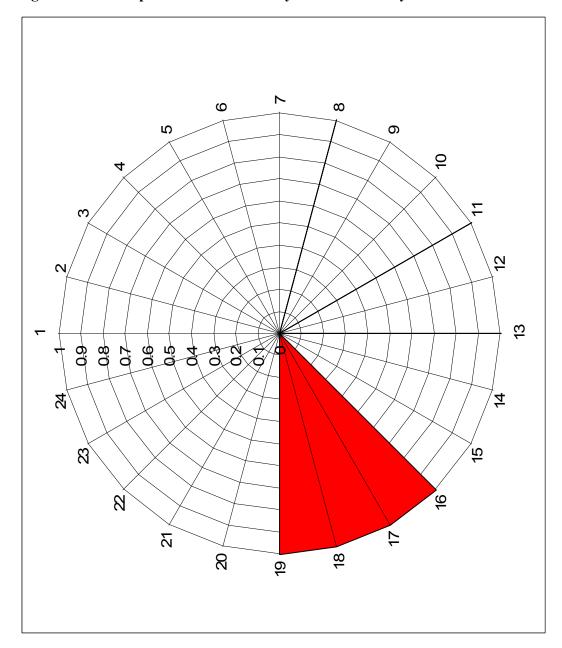


Figure 4.20 Miscellaneous Fire Incidents By Day of the Week

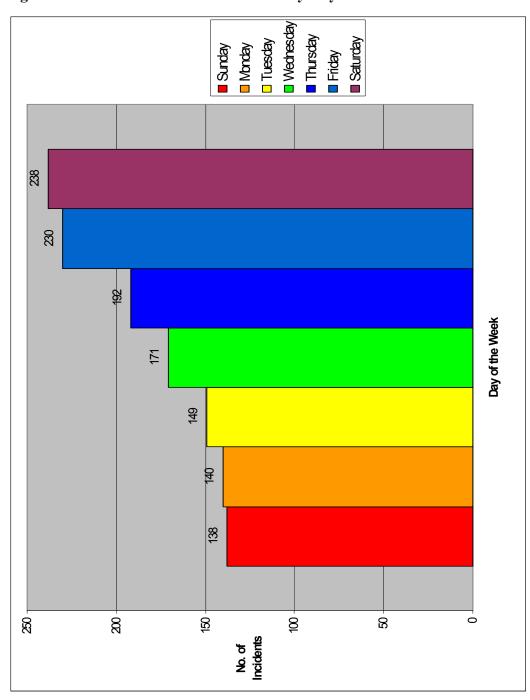


Figure 4.21 Miscellaneous Fire Incidents By Hour of the Day: 2002-2004

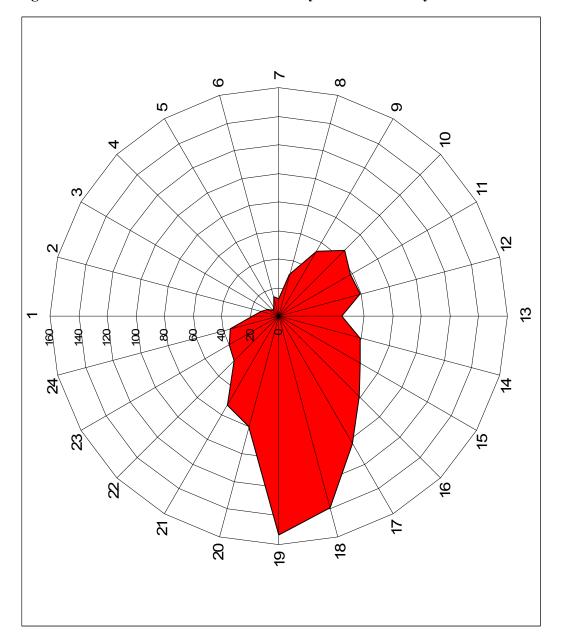


Figure 4.22 Fire Alarms By Day of the Week: 2002-2004

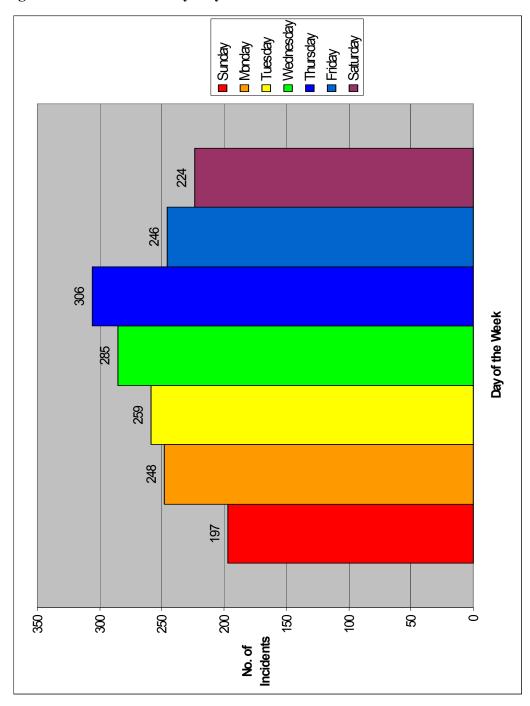


Figure 4.23 Fire Alarms By Hour of the Day: 2002-2004

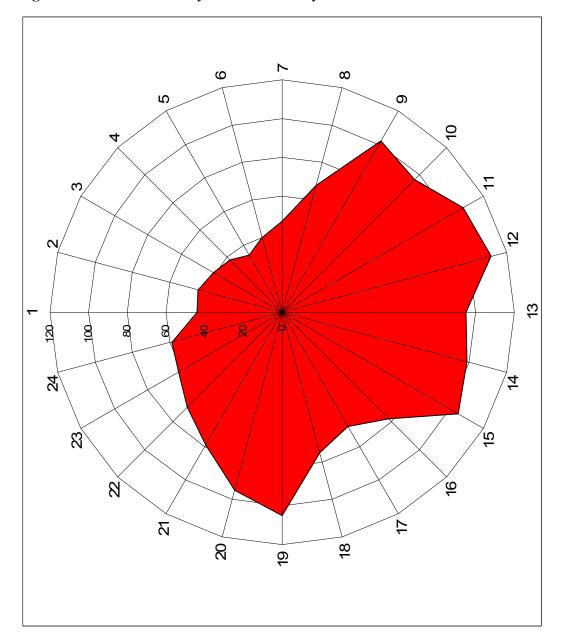


Figure 4.24 All EMS Incidents By Day of the Week: 2002-2004

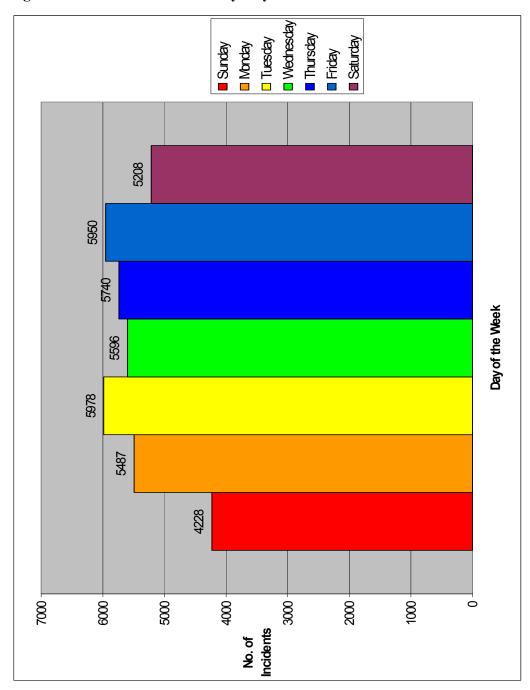


Figure 2.25 All EMS Incidents By Hour of the Day: 2002-2004

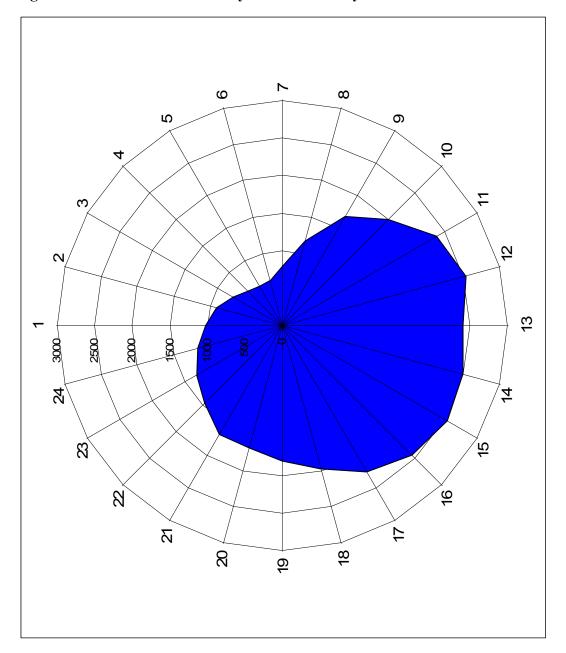


Figure 4.26 EMS – Emergent Incidents By Day of the Week

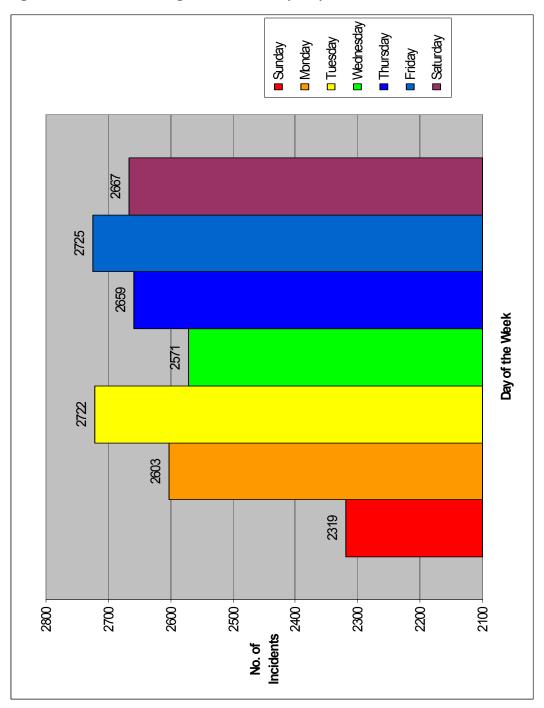


Figure 4.27 EMS – Emergent Incidents By Hour of the Day

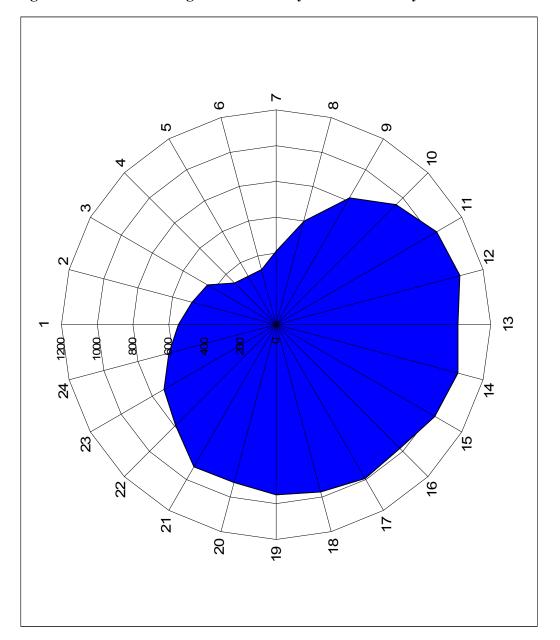
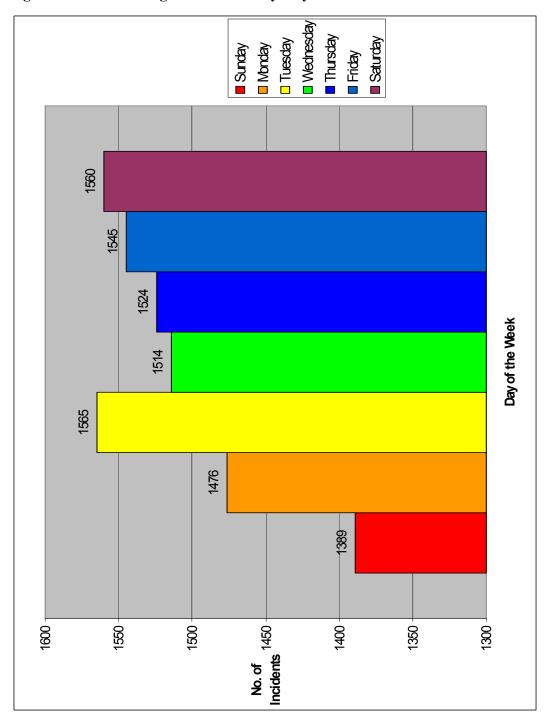


Figure 4.28 EMS – Urgent Incidents By Day of the Week: 2002-2004



EMS – Urgent Incidents By Hour of the Day: 2002-2004

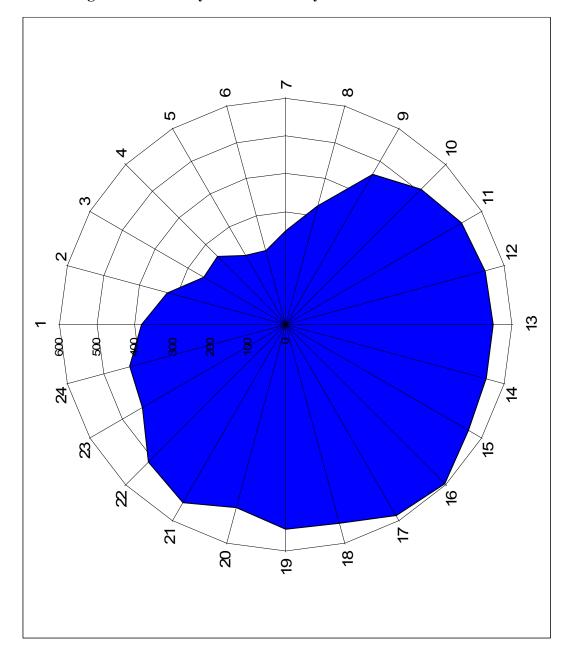


Figure 4.30 EMS – Public Assists By Day of the Week: 2002-2004

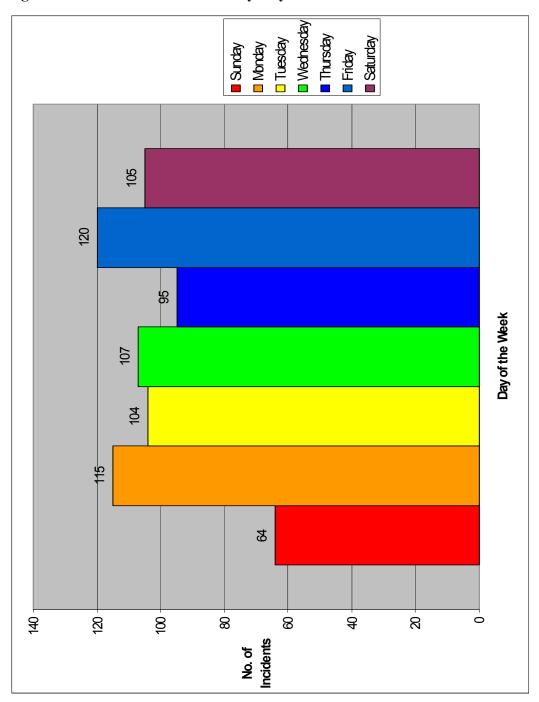


Figure 4.31 EMS – Public Assists By Hour of the Day: 2002-2004

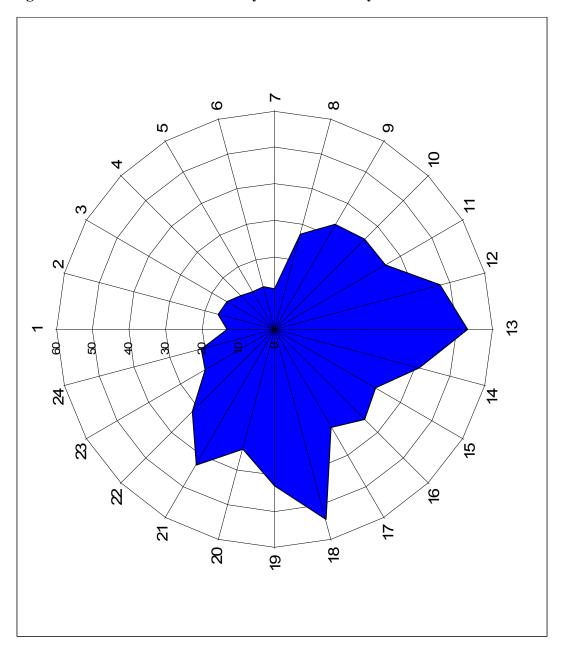


Figure 4.32 EMS – Transport Only By Day of the Week: 2002-2004

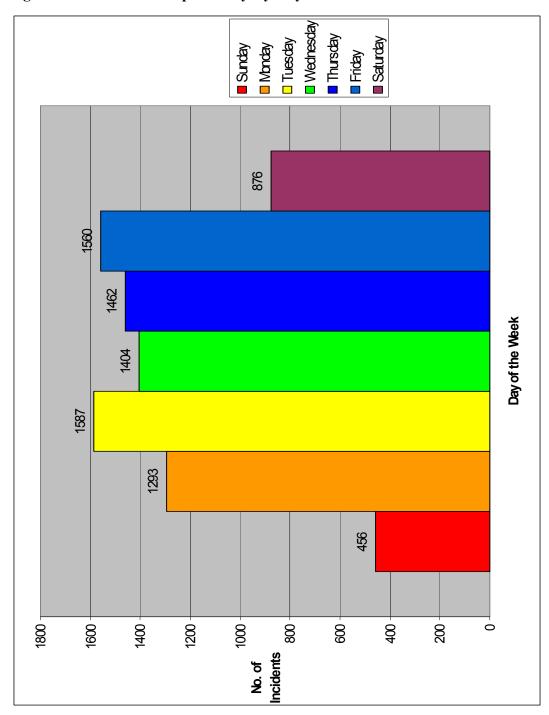


Figure 4.33 EMS – Transport Only By Hour of the Day: 2002-2004

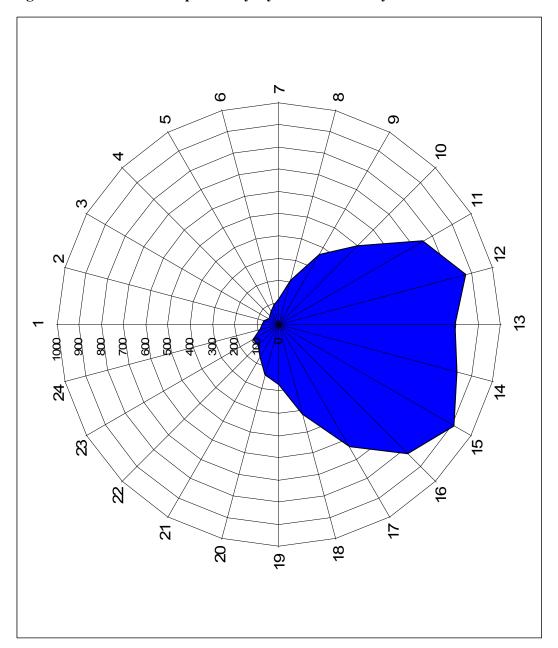


Figure 4.34 Technical Rescue Incidents By Day of the Week: 2002-2004

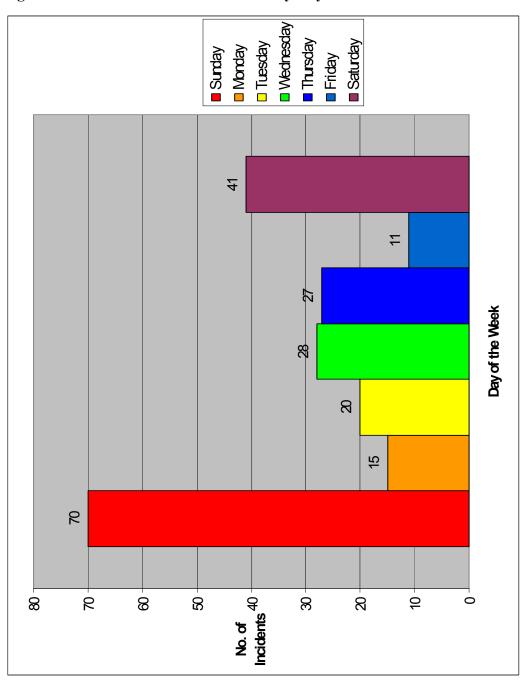


Figure 4.35 Technical Rescue Incidents By Hour of the Day: 2002-2004

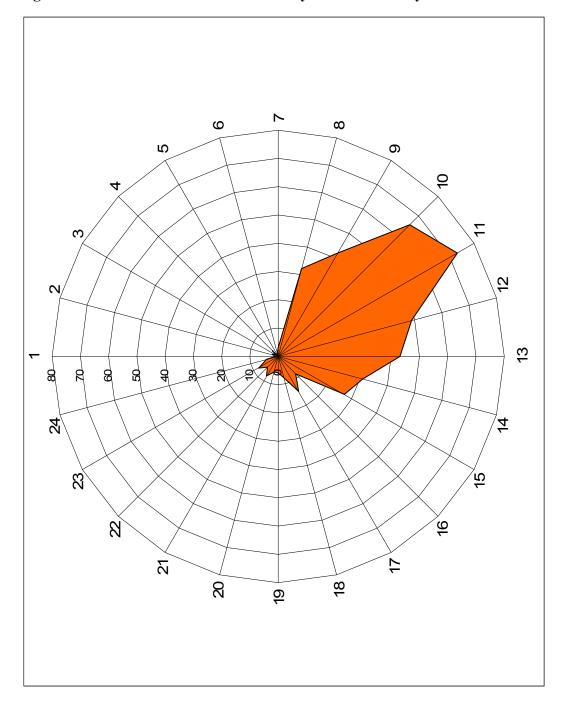


Figure 4.36 Hazardous Materials Incidents By Day of the Week: 2002-2004

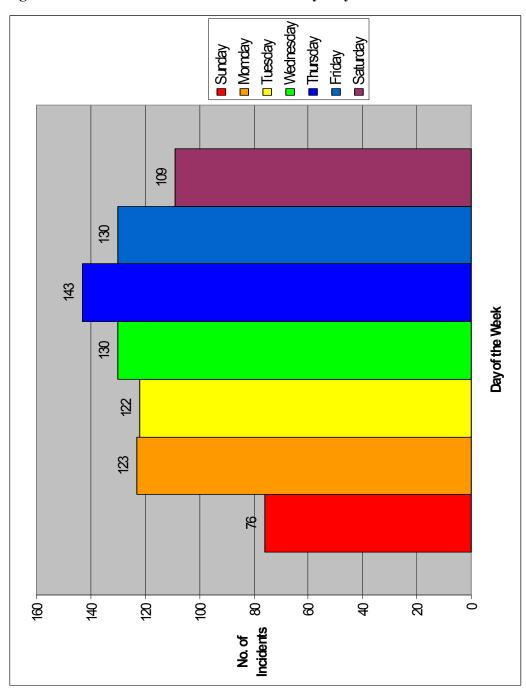


Figure 4.37 Hazardous Materials Incidents By Hour of the Day: 2002-2004

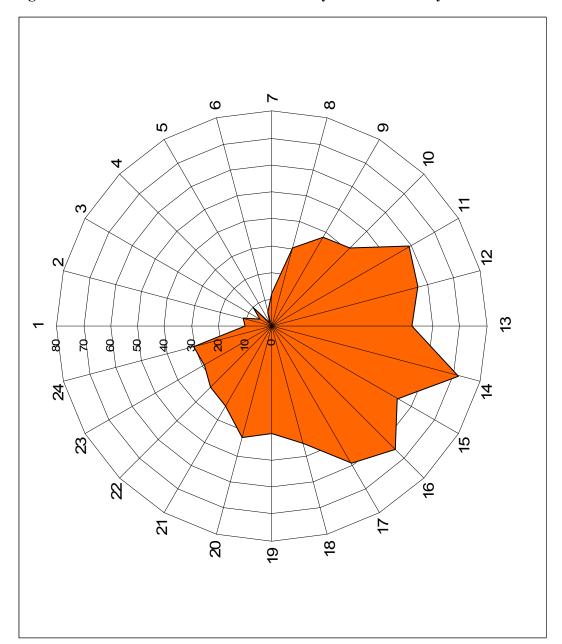


Figure 4.38 Mutual Aid By Day of the Week: 2002-2004

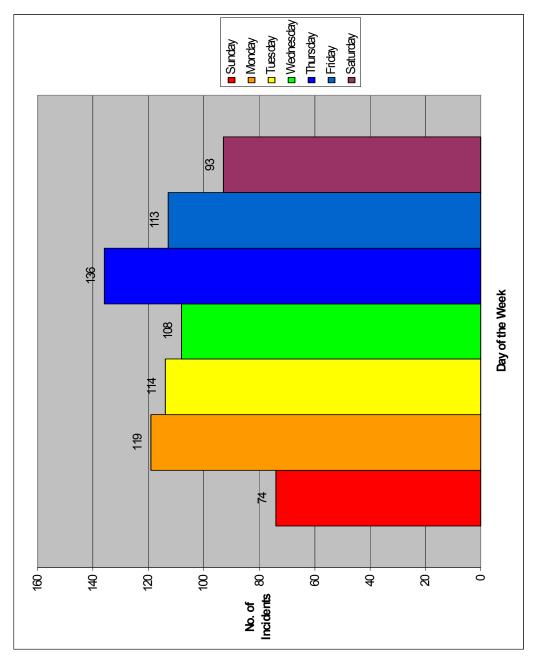


Figure 4.39 Mutual Aid BY Hour of the Day: 2002-2004

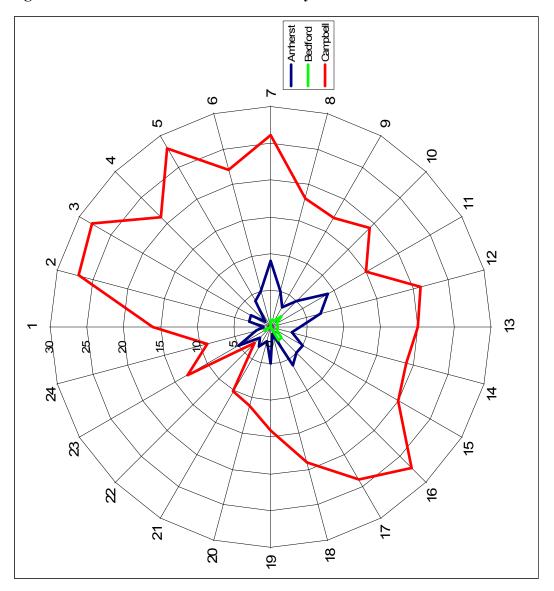


Figure 4.40 Mutual Aid For Amherst County By Hour of the Day: 2002-2004

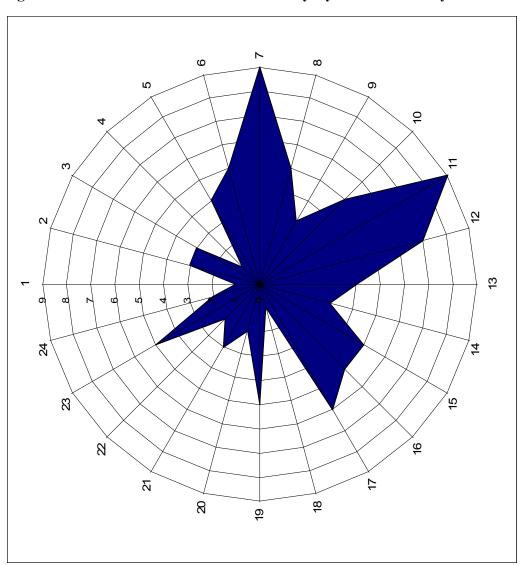


Figure 4.41 Mutual Aid For Bedford County By Hour of the Day: 2002-2004

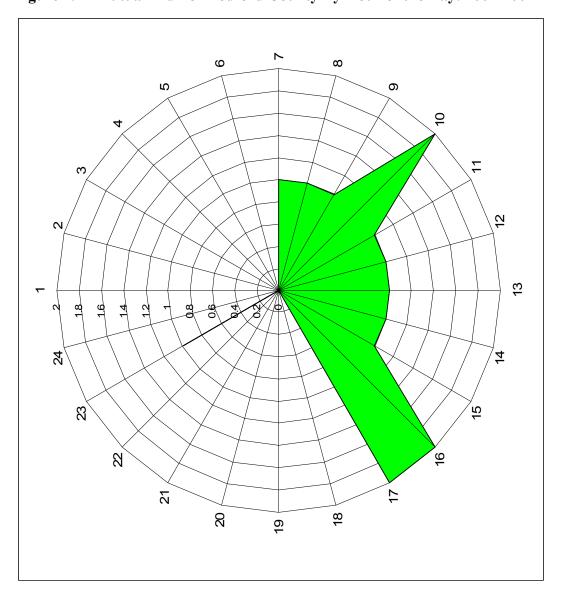


Figure 4.42 Mutual Aid For Campbell County By Hour of the Day: 2002-2004

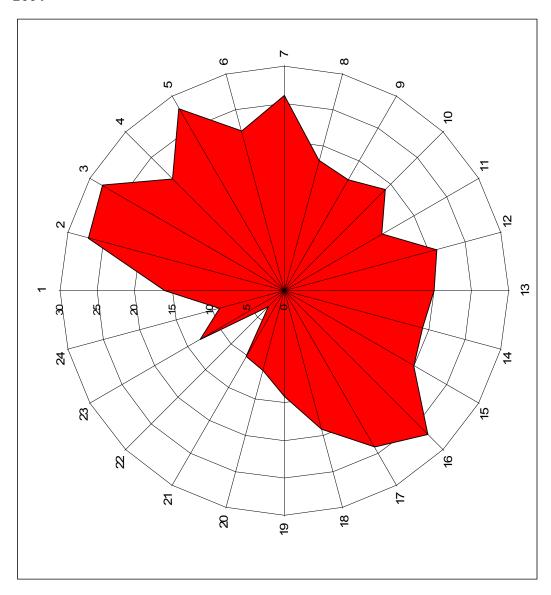
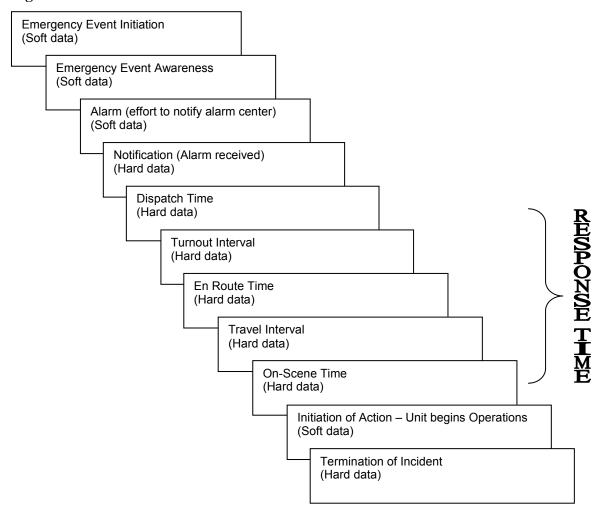


Figure 5.1 Cascade of Events



**Table 5.1 Current Response Times – All Emergency Incidents** 

Element	Adopted Standard	Mean	80th Percentile	90th Percentile
Alarm Rec'd Period	1:00	0:43	1:07	1:18
Turnout Time	1:00	0:43	1:05	1:17
Travel Time (1st arriving company)	4:00	2:36	3:59	4:42
Total Reflex Time (Customer Interval)	6:00	4:08	6:11	7:17

Figure 5.2 Flashover: Time – Temperature Relationship

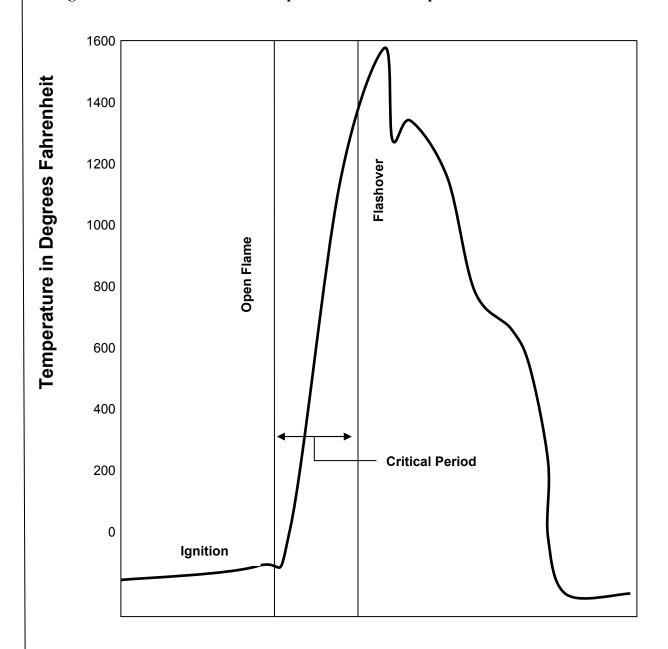


Figure 5.3

## The Significance of Flashover

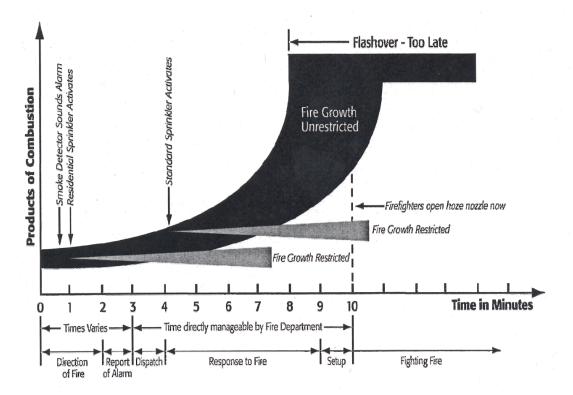
## **Pre-Flashover:**

Limited to one room Requires smaller attack lines Search and rescue is easier Initial assignment can handle

## **Post-Flashover:**

May spread beyond one room Requires more and larger attack lines Compounds search and rescue Requires additional companies

**Figure 5.4 Time Versus Products of Combustion** 



Critical Task	Minimum Risk	Moderate Risk	Significant Risk	Maximum Risk
Size Up and Command	1^	1	1	1
Accountability	1^	1	1	1
Offensive Fire Attack	2^	2	4	4-6
Pump Operations/Water Supply	1	1	1	2
Search and Rescue		2	2	4
Ventilation		2	2	4
Aerial Device Operator*		1	1	1
Sub-total: Initial Attack	3-5^	10	12	17-19
Rapid Intervention Team		2	4	4-6
Back Up Lines		2	4	4
Salvage and Overhaul	**	**	**	**
Rehabilitation		2	2	4
Designated Safety Officer	1^	1	1	1
Sub-total: Initial Support	1	7	11	13-15
Total: Initial Attack and Initial Support	4-6^	17	23	30-34

<sup>^</sup> The engine company officer can serve multiple roles at minimum risk incidents.

<sup>\*</sup> An aerial device operator would only be necessary if such device is being deployed at the incident.

<sup>\*\*</sup> Salvage and overhaul is addressed by effective response force as priorities shift.

Table 5.3 Critical Tasks Cardiac Arrest/Stroke/Overdose Multi-System Trauma

Critical Task	Cardiac Arrest	Stroke	Multi-System Trauma	
Patient Assessment	2 per patient	2 per patient	2 per patient	
Airway Management/Intubation	2 per patient	2 per patient	2 per patient	
Cardiac Defibrillation	1	N/A	N/A	
CPR	1	N/A	N/A	
EKG Monitoring	1	1	1	
IV/Pharmocology	1	1	1	
Splint/Bandage/Immobilization	N/A	N/A	1	
Patient Lifting/Packaging	2 - 4	2 – 4	2 – 4	
Medical Information Collection	1	1	1	

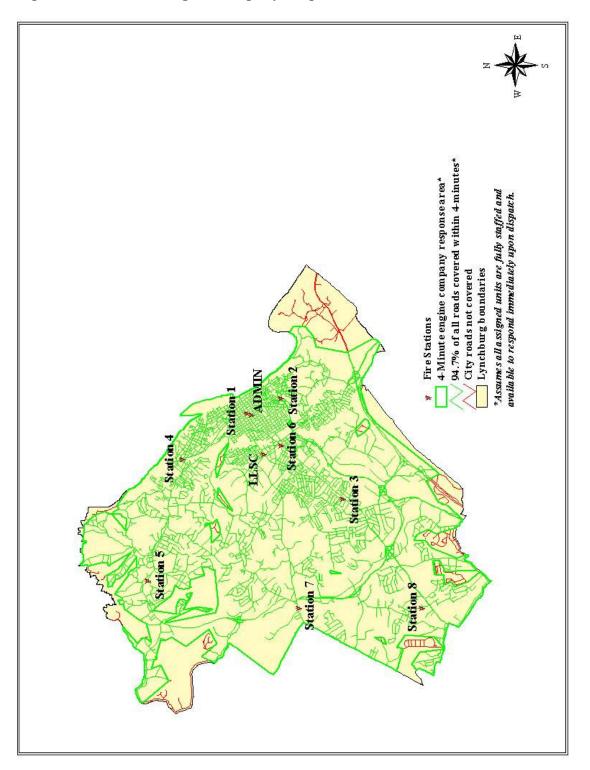
**Table 5.4 General Hazardous Materials Team Assignments** 

Critical Task	
Incident Command and Safety Officer	2
Site Control (Detection and Monitoring)	2
Referencing	2
Entry and Backup Teams	4
Decontamination and medical group	2

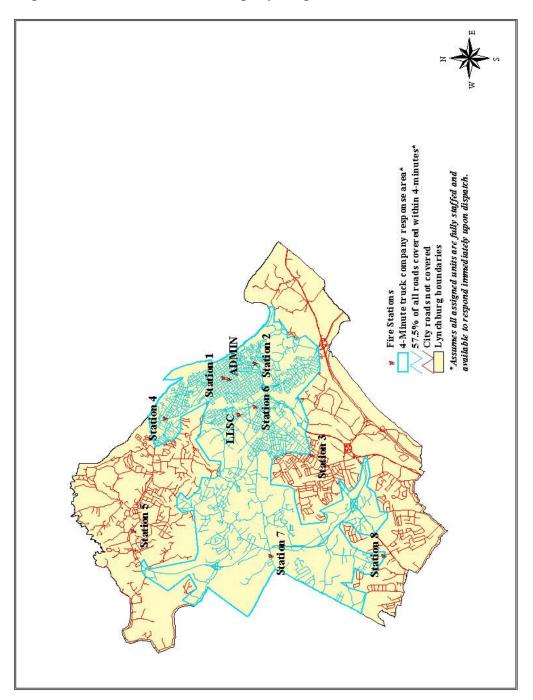
**Figure 5.6 Baseline Fire Flow Response Goals** 

Risk Types	No. of Companies	Company Due-In (Time in Minutes)		
		First	Second	Third plus
Maximum 4,000+ gpm	5	4	5	8
Significant 3,000+ gpm	4	4	6	8
Moderate 1,000 - 2,000+ gpm	3	4	8	8
Low < 1,000 gpm	1	4	-	-

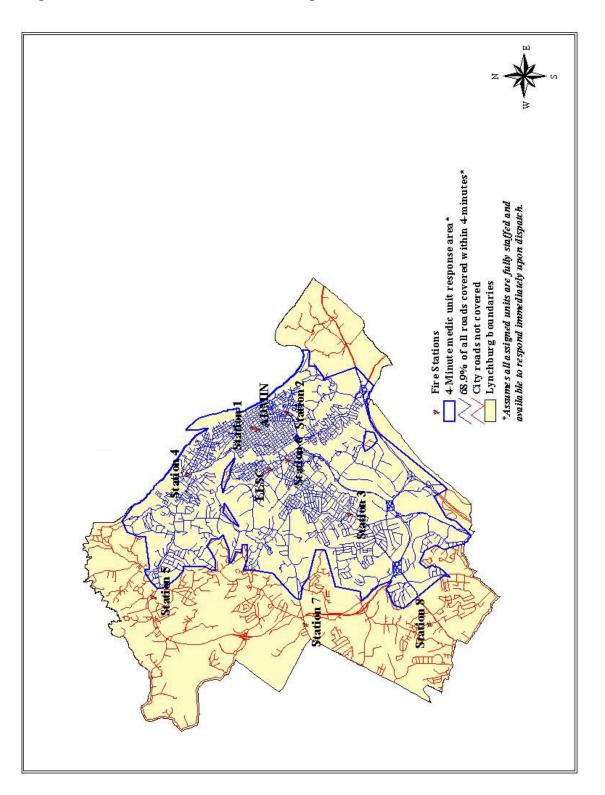
Map 6.1 Four-Minute Engine Company Response Area



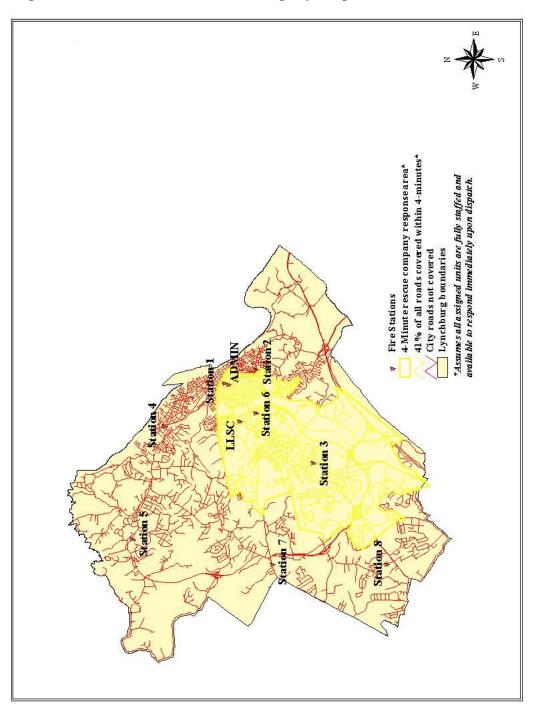
**Map 6.2 Four-Minute Truck Company Response Area** 



Map 6.3 Four-Minute ALS Medic Unit Response Area



Map 6.4 Four-Minute Rescue Company Response Area



Map 6.5 **Eight-Minute Engine Company Response Area** 

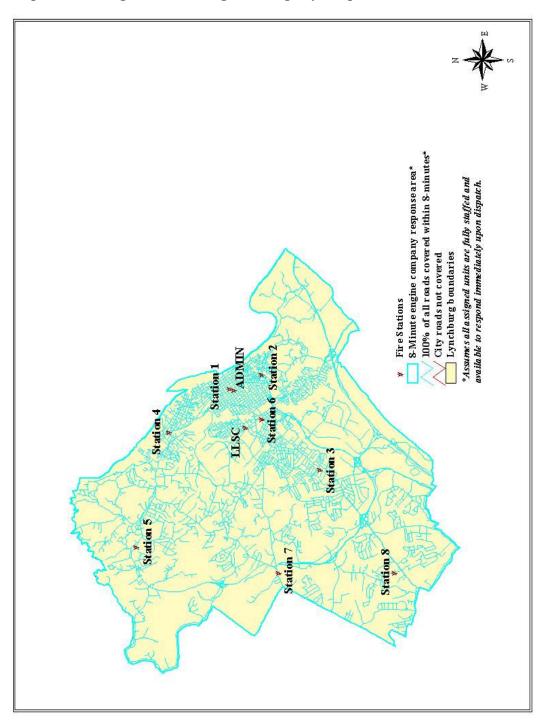
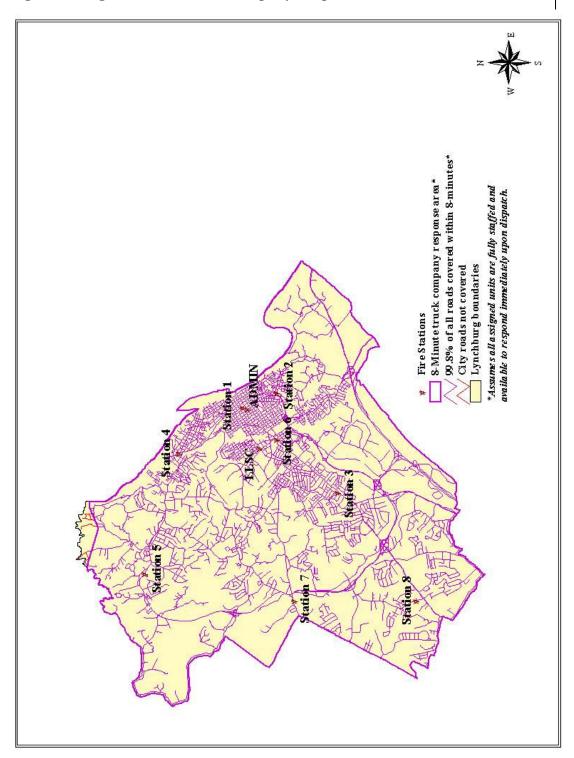
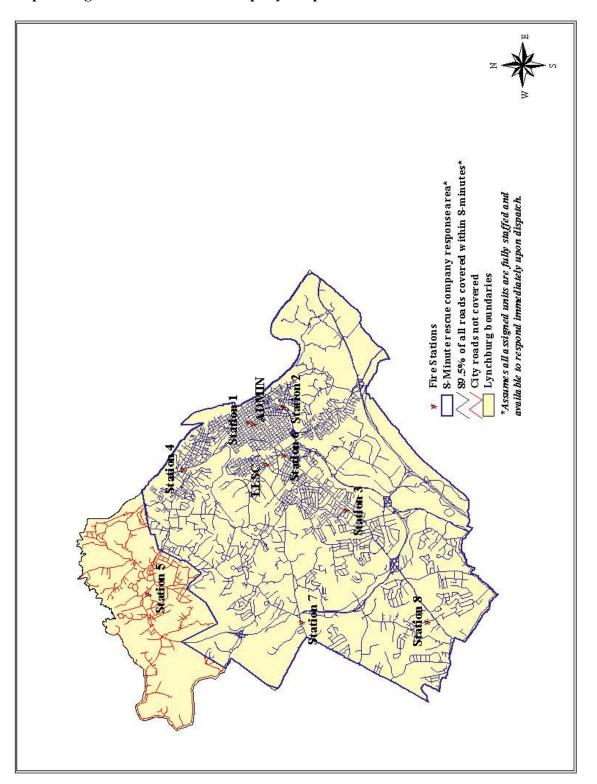


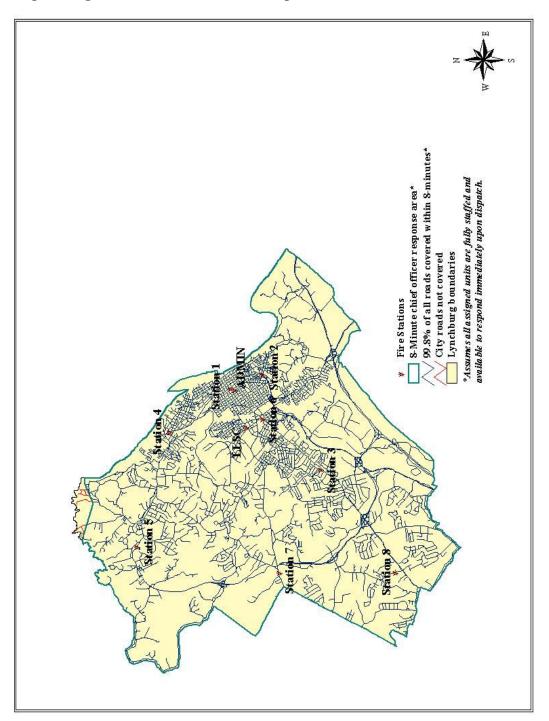
Figure 6.6 Eight-Minute Truck Company Response Area



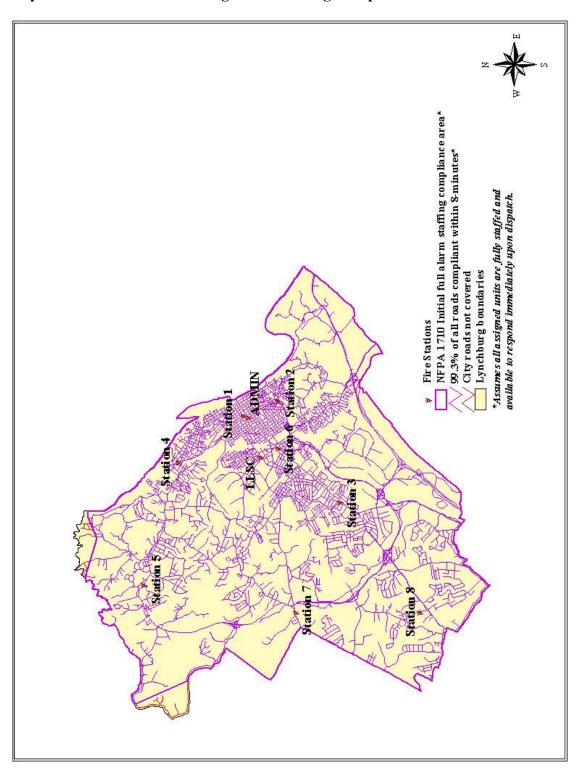
Map 6.7 Eight-Minute Rescue Company Response Area



Map 6.8 Eight-Minute Chief Officer Response Area



Map 6.9 Initial Full Alarm Assignment Staffing Compliance Area



Map 6.10 Eight-Minute ALS Medic Unit Response Area

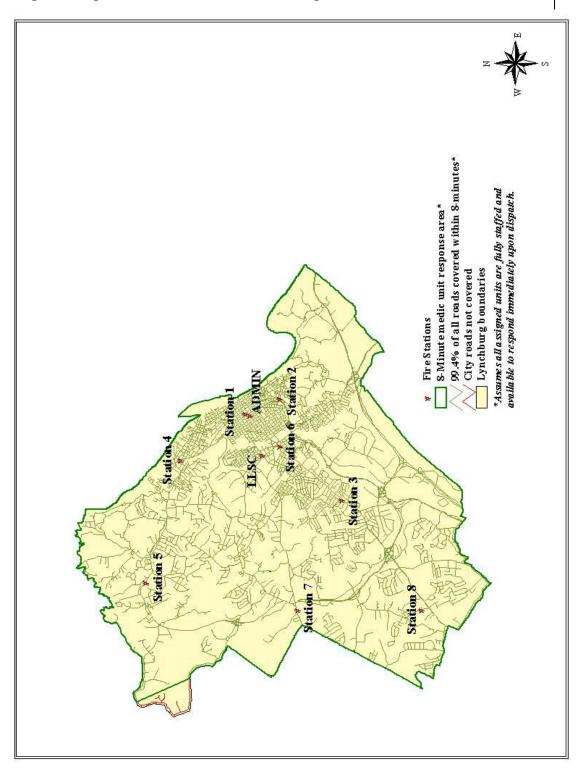


Table 6.1 Total Reflex Time: Structure Fires (Full Complement): 2002-2004

<b>Element</b>	Adopted Standard	80th Percentile	90th Percentile	90th Percentile, Total Elapsed Time Since Initial Dispatch
Alarm Processing	1:00	1:18	1:27	
Turnout, First in Engine	1:00	0:58	1:04	
Travel, First in Engine	4:00	3:02	3:28	4:32
Travel, Second in Engine	8:00	4:18	4:39	5:43
Travel, Third in Engine	8:00	4:59	5:22	6:26
Travel, First in Truck	8:00	4:32	4:58	6:02
Travel, First in Rescue	8:00	5:20	5:36	6:40
Travel, First in Medic	8:00	3:49	4:05	5:09
Travel, First in Battalion Chief	8:00	4:33	4:47	5:51
Travel, Full Complement	8:00	5:20	4:45	6:40
Total Reflex Time (Customer Interval)	10:00	7:36	8:07	

Table 6.2 Response Time: Residential Fire Alarms: 2002 -2004

Residential, Element	Adopted Standard	80th Percentile	90th Percentile	90th Percentile, Total Elapsed Time Since Initial Dispatch
Alarm Processing	1:00	1:19	1:27	
Turnout, First in Engine	1:00	1:10	1:20	
Travel, First in Engine	4:00	4:23	4:37	5:57
Travel, First in Truck	N/A	N/A	N/A	N/A
Travel, Full Complement	4:00	4:23	4:37	5:57
Total Reflex Time (Customer Interval)	6:00	6:52	7:24	

Table 6.3 Response Time: Commercial Fire Alarms: 2002-2004

Commercial, Element	Adopted Standard	80th Percentile	90th Percentile	90th Percentile, Total Elapsed Time Since Initial Dispatch
Alarm Processing	1:00	1:13	1:18	
Turnout, First in Engine	1:00	1:05	1:13	
Travel, First in Engine	4:00	3:21	3:37	4:50
Travel, First in Truck	8:00	4:32	4:49	6:02
Travel, Full Complement	8:00	4:13	4:45	5:58
Total Reflex Time (Customer Interval)	10:00	6:31	7:16	

Table 6.4 Response Time: EMS – Emergent: 2002-2004

EMS - Emergent	Adopted Standard	80th Percentile	90th Percentile	90th Percentile, Total Elapsed Time Since Initial Dispatch
Alarm Processing	1:00	1:01	1:09	
Turnout, First in Engine	1:00	1:00	1:09	
Travel, First in Engine	4:00	3:16	3:27	4:36
Travel, First in Medic	8:00	4:06	4:43	5:52
Total Reflex Time (Customer Interval)	10:00	6:07	7:01	

Table 6.5 Response Time: EMS – Urgent: 2002-2004

EMS - Urgent	Adopted Standard	80th Percentile	90th Percentile	90th Percentile, Total Elapsed Time Since Initial Dispatch
Alarm Processing	1:00	1:14	1:25	
Turnout, First in Medic	1:00	1:05	1:19	
Travel, First in Medic	4:00	4:30	5:20	6:39
Total Reflex Time (Customer Interval)	6:00	6:49	8:04	

Table 6.6 Response Time: Hazardous Materials Incidents: 2004-2004

Element	Adopted Standard	80th Percentile	90th Percentile	90th Percentile, Total Elapsed Time Since Initial Dispatch
Alarm Processing	1:00	1:18	1:32	
Turnout, First in Engine	1:00	1:04	1:12	
Travel, First in Engine	4:00	3:34	4:18	5:30
Travel, Haz Mat Unit	10:00	6:23	7:09	8:21
Travel, First in Rescue	8:00	6:31	6:43	7:55
Travel, First in Medic	8:00	6:22	6:50	8:02
Travel, First in Battalion Chief	8:00	4:45	5:11	6:23
Total Reflex Time (Customer Interval)	12:00	8:45	9:53	

Table 6.7 Response Time: Technical Rescue Incidents: 2002-2004

Element	Adopted Standard	80th Percentile	90th Percentile	90th Percentile, Total Elapsed Time Since Initial Dispatch
Alarm Processing	1:00	1:36	2:00	
Turnout, First in Engine	1:00	0:48	0:57	
Travel, First in Engine	4:00	3:46	4:58	5:55
Travel, Tech Rescue Unit	12:00	13:21	15:33	16:30
Travel, First in Rescue	8:00	6:40	8:19	9:16
Travel, First in Medic	8:00	4:35	5:48	6:45
Travel, First in Battalion Chief	8:00	2:26	4:17	5:14
Total Reflex Time (Customer Interval)	14:00	17:57	18:30	

Figure 7.1 Analysis of Response Reliability By First Due Engine: 2004-2004

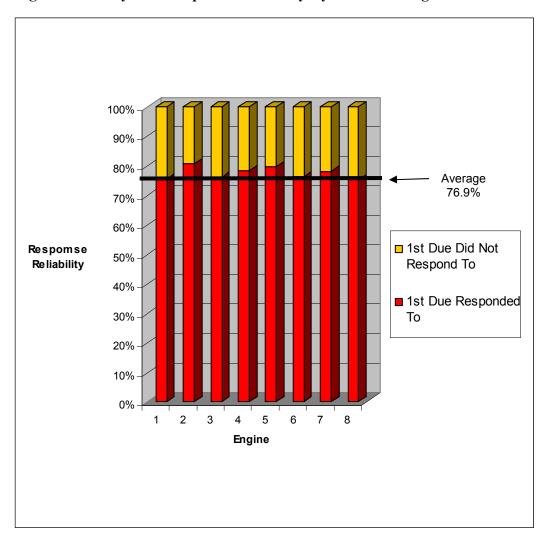


Figure 7.2 Analysis of Response Reliability By First Due Medic Unit: 2002-2004

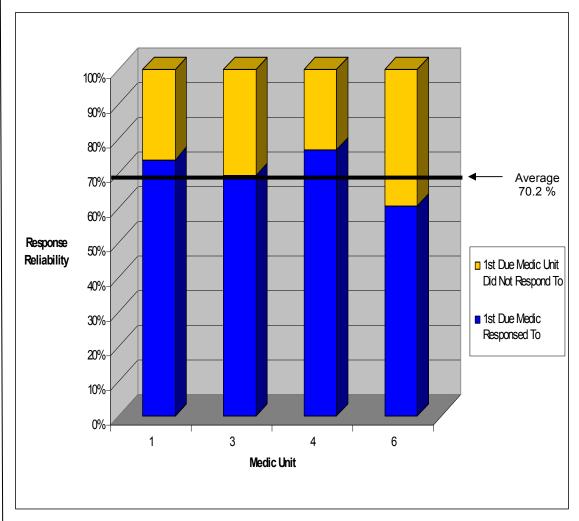


Figure 7.3 Run Distribution By Type of Apparatus: 2002-2004

